DPS-10 simple setup guide

thank you for choosing JBL. For more than 50 years, JBL has been involved in every aspect of music and film recording and reproduction, from live performances to monitoring the recordings you play in your home, car or office.

We're confident that the JBL Loudspeakers you have chosen will provide every note of enjoyment that you expected – and that when you think about purchasing additional audio equipment for your home, car or office, you will once again choose JBL.

Please take a moment to complete the enclosed profile card. It enables us to keep you posted on our latest advancements, and helps us to better understand our customers and build products that meet their needs and expectations.

JBL Consumer Products

read first! Important Safety Precautions!

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: To prevent electric shock, do not remove the grounding plug on the power cord, or use any plug or extension cord that does not have a grounding plug provided. Make certain that the AC outlet is properly grounded. Do not use an adapter plug with this product.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

1. Read Instructions. All the safety and operating instructions should be read before the product is operated.

2. Retain Instructions. The safety and operating instructions should be retained for future reference.

3. Heed Warnings. All warnings on the product and in the operating instructions should be adhered to.

4. Follow Instructions. All operating and use instructions should be followed.

5. Water and Moisture. The product should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, and the like.

6. Accessories. Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

7. Wall or Ceiling Mounting. The product should be mounted on a wall or ceiling only when and as recommended by the manufacturer.

8. Ventilation. Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

9. Heat. The product should be situated away from heat sources such as radiators, heat registers, stoves or other products that produce heat. If placed near an amplifier, check with the manufacturer for applicability.

10. Power Sources. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

11. Grounding or Polarization. This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

12. Power-Cord Protection. Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from the product.

13. Cleaning. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

14. Nonuse Periods. The power cord of the product should be unplugged from the outlet when left unused for long periods of time.

15. Lightning. For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Overloading. Do not overload wall outlets, extension cords or integral convenience receptacles, as this can result in a risk of fire or electric shock.

17. Object and Liquid Entry. Never push objects of any kind into this product through openings, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

18. Damage Requiring Service. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

a. The power-supply cord or the plug has been damaged; or

b. Objects have fallen onto, or liquid has been spilled into, the product; or

c. The product has been exposed to rain or water; or

d. The product does not operate normally when following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation; or

e. The product has been dropped, or the enclosure damaged; or

f. The product does not appear to operate normally or exhibits a marked change in performance.

19. Attachments. Do not use attachments not recommended by the product manufacturer, as they may cause hazards.

20. Replacement Parts. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

21. Safety Check. Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

22. Servicing. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Part No. JBLULA 6/96

Placement

- **As a general rule, bass response increases as a subwoofer is placed closer to a wall. Therefore, bass output is maximized when the subwoofer is placed in a corner.**
- **It is also recommended that the subwoofer be positioned along the same wall as the front loudspeakers.**

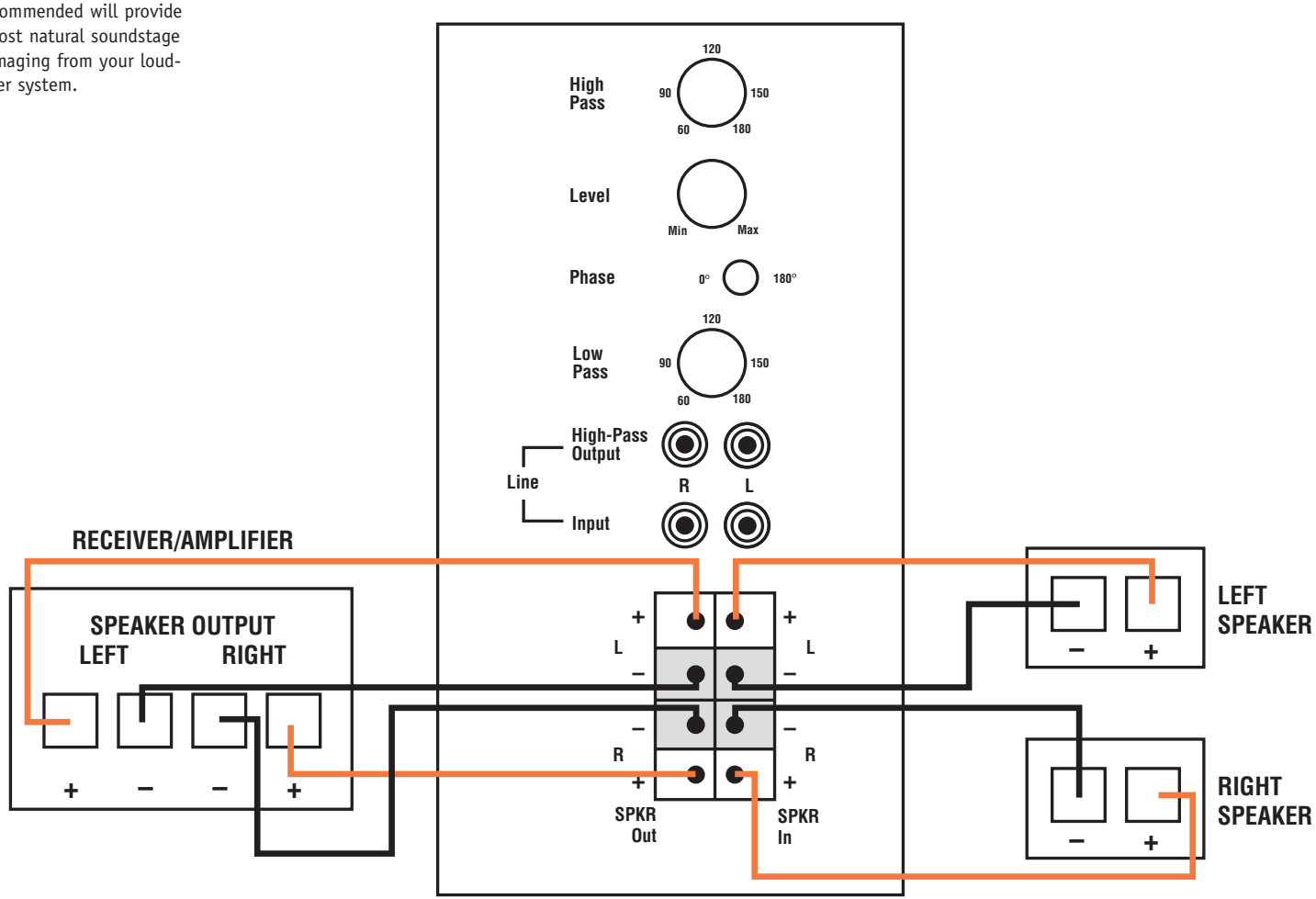
Low-frequency sounds are normally omnidirectional, meaning the listener can't tell where they are generated from. However, frequencies between 75Hz – 150Hz can be localized, especially at higher volume levels. Positioning your subwoofer as recommended will provide the most natural soundstage and imaging from your loudspeaker system.

Remember that these are just guidelines. Since every listening room is different, JBL strongly recommends experimenting with the positioning of your subwoofer to obtain the most pleasing results in *your* room. One technique that can help you find the ideal subwoofer location is to temporarily place the subwoofer near the main listening location. Then move around the room and determine where you hear the most pleasing bass performance. This would then be the ideal location for the subwoofer.

Hookup

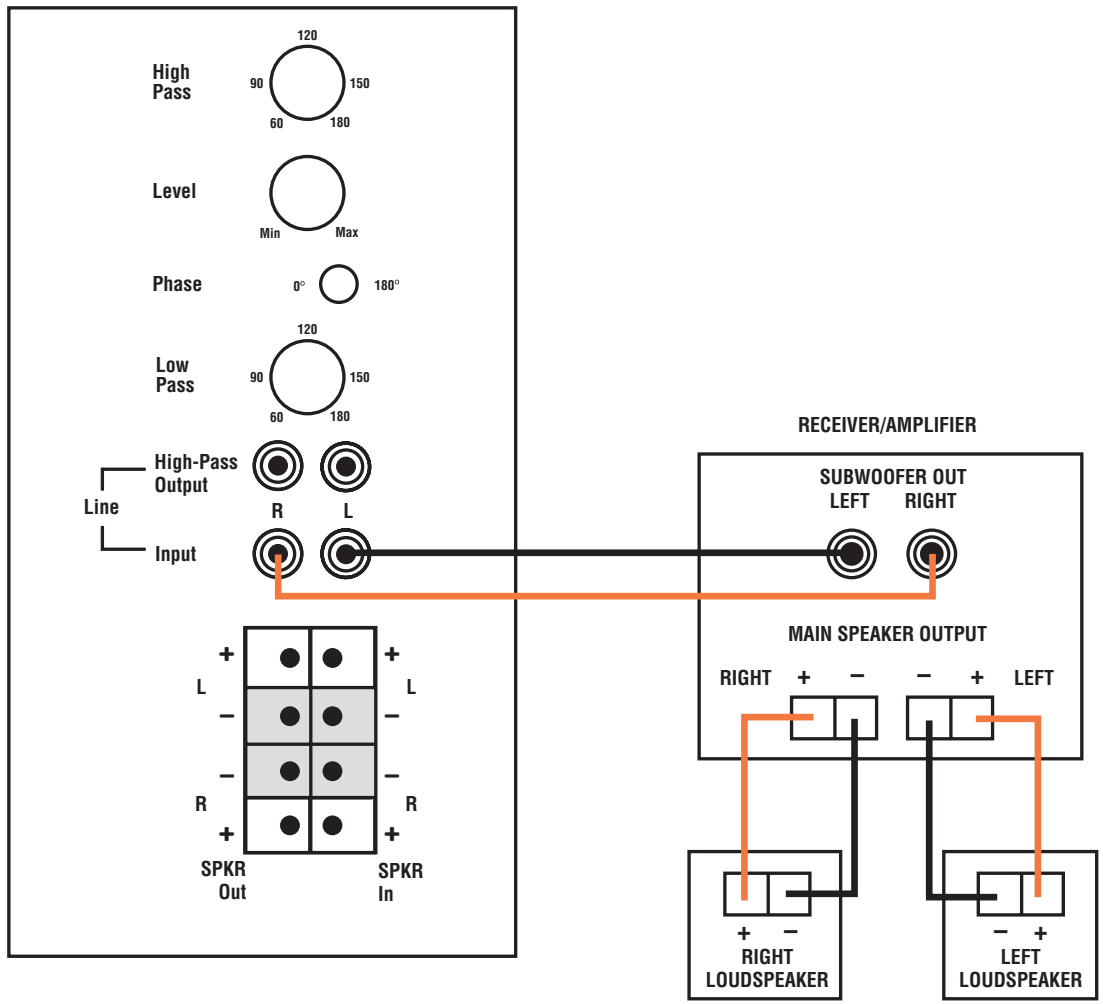
When we designed the DPS-10 powered subwoofer, our goal was to offer the user the best possible performance combined with the the most flexible and complete installation options. Please look over the following three examples to determine which description best matches your system and follow the corresponding hookup instructions.

1) **If your receiver/amplifier has no subwoofer outputs or preamp outputs for the left and right channels.**



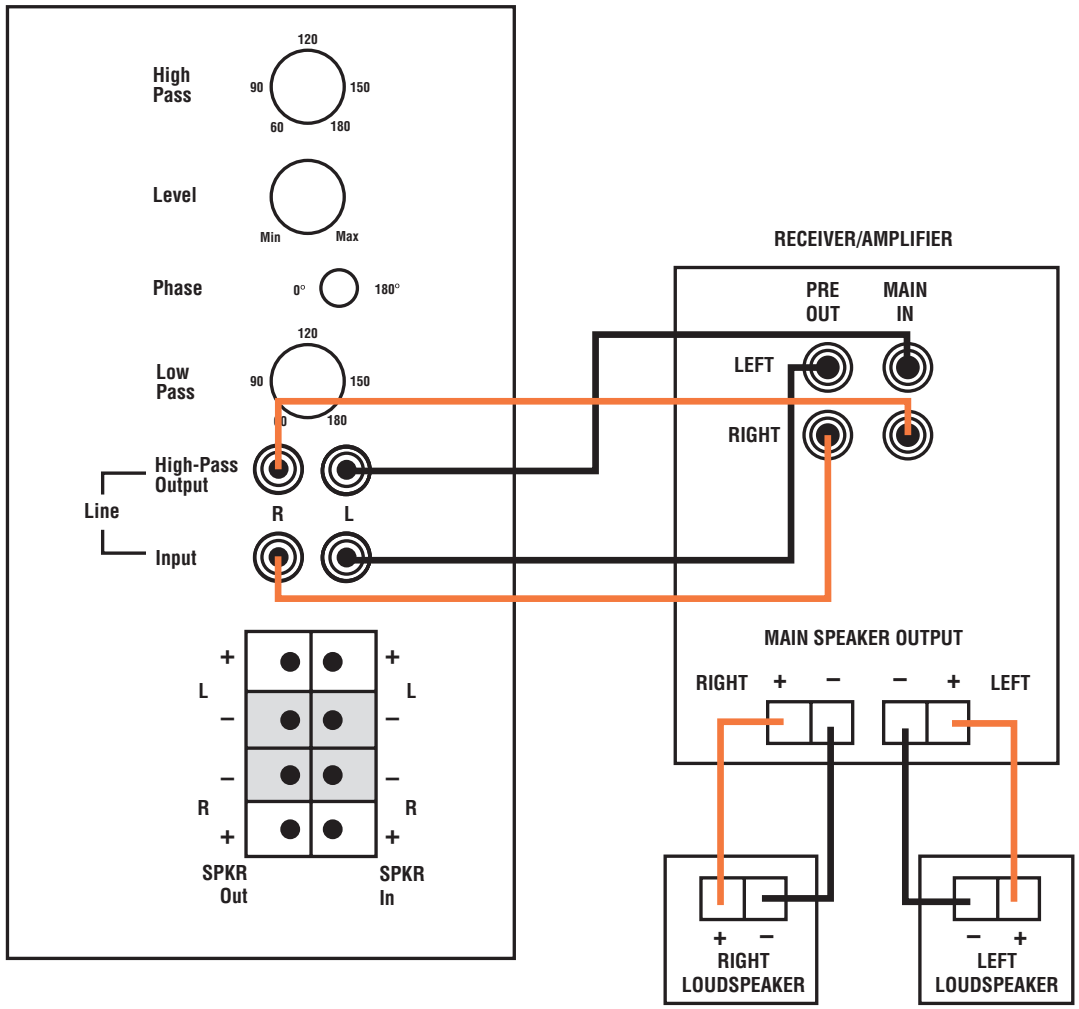
2) If your receiver/amplifier has subwoofer outputs or preamp output jacks for the left and right channels.

Note: Some receivers/amplifiers have a single (mono) subwoofer output. In this case, it is recommended that you use a "Y"-connector (not included) to maximize the subwoofer's performance.



3) If your receiver/amplifier has preamp output jacks and main input jacks for the left and right channels or you have a separate preamp/processor and power amplifier.

This method of hookup can offer the highest level of performance for your complete loudspeaker system. The DPS-10 incorporates a variable high-pass crossover *in addition to* a variable low-pass crossover. When hooked up as shown above, the subwoofer will limit the low-frequency information that is returned to your receiver/amplifier. Your receiver/amplifier does not need to waste valuable power reproducing the low frequencies. In addition, since no low-frequency information is being sent to your main loudspeakers, they are able to reproduce mid and high frequencies with greater clarity.



Operation

Power

When the unit is plugged in and no signal is received for approximately 10 – 15 minutes, the subwoofer will go into a standby mode until a signal is present. Due to JBL's unique, high-efficiency digital-amplifier design, power consumption is minimal when the subwoofer is not receiving a signal.

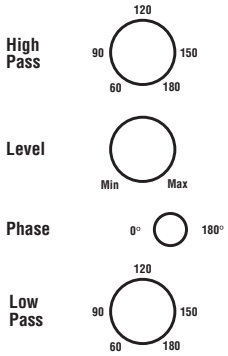
Level Control

The subwoofer Level Control, located on the rear panel, adjusts the volume of the subwoofer relative to the rest of the system. Proper level adjustment depends on several variables such as room size, subwoofer placement, type of main speakers and listener position. Adjust the subwoofer level so that the volume of the bass information is pleasing to you.

Crossover Adjustments

Low-Pass Control

The Low-Pass control determines the highest frequency at which the subwoofer reproduces sounds. If your main speakers can comfortably reproduce some low-frequency sounds, set this control to a lower frequency setting, between 50Hz – 100Hz. This will concentrate the subwoofer's efforts on the ultradeep bass sounds required by today's films and music. If you are using smaller bookshelf speakers that do not extend to the lower bass frequencies, set the low-pass crossover control to a higher setting, between 120Hz – 180Hz.



High-Pass Control

- If you hooked up your subwoofer as shown in Hookup 3 on page 5, you also have the capability of adjusting the high-pass frequency. The High-Pass control determines the frequency at which the main speakers will start reproducing sounds. If your main speakers can comfortably reproduce some low-frequency sounds, also set this control to a lower frequency setting, between 50Hz – 100Hz. This will concentrate the subwoofer's efforts to the ultradeep bass sounds, while your main speakers continue to reproduce the mid-bass information. If you are using smaller bookshelf speakers that do not extend to the lower bass frequencies, set the high-pass crossover control to a higher setting, between 125Hz – 180Hz. With this setting, your main speakers will not have the burden of reproducing any low-frequency sounds.
- If you hooked up your subwoofer as shown in Hookup 1 on page 3, the high-pass frequency is fixed at 180Hz.
- If you hooked up your subwoofer as shown in Hookup 2 on page 4, there is no high-pass control. Unless your receiver/amplifier incorporates a high-pass crossover, your main speakers will continue to get a full-range signal.

Final adjustment and blending of the low-pass and high-pass controls may evolve over several listening sessions. A good starting point would be to set both the low- and high-pass controls to the same frequency and adjust from that point.

Phase Control

The Phase Control determines whether the subwoofer speaker's piston-like action moves in and out with the main speakers, 0°, or opposite the main speakers, 180°. There is no correct or incorrect setting. Proper phase adjustment depends on several variables such as room size, subwoofer placement and listener position. Adjust the phase switch to maximize bass output at the listening position.

Remember, every system, room and listener is different. There are no right or wrong settings; any setting you choose will result in excellent performance. Should you decide to fine-tune your system for optimum performance, be patient and trust your ears. It will be worth the effort involved to fully "tweak" your system.

Troubleshooting

If you used the high-level (speaker) inputs and there is no sound from any of the speakers, check the following:

- Receiver/amplifier is on and a source is playing.
- Powered subwoofer is plugged in.
- Check all wires and connections between receiver/amplifier and speakers. Make sure all wires are connected. Make sure none of the speaker wires are frayed, cut or punctured.
- Review proper operation of your receiver/amplifier.

If there is low bass output, check the following:

- Make sure the connections to the left and right "Speaker Inputs" have the correct polarity (+ and –).
- Make sure that the subwoofer is plugged into an active electrical outlet.
- Powered subwoofer is plugged in.
- Adjust the crossover point.

If you used the line-level inputs and there is no sound from the subwoofer, check the following:

- Receiver/amplifier is on and a source is playing.
- Powered subwoofer is plugged in.
- Check all wires and connections between receiver/amplifier and subwoofer. Make sure all wires are connected. Make sure none of the wires are frayed, cut or punctured.
- Review proper operation of your receiver/amplifier.

Specifications

Amplifier Power (RMS)	150 watts
Driver	10" High-Polymer Laminate
Inputs	Line Level and Speaker Level
Outputs	Line Level and Speaker Level
Low-Pass Frequency	Continuously variable from 60Hz – 180Hz
High-Pass Frequency	Continuously variable from 60Hz – 180Hz when using line-level outputs 180Hz when using speaker-level outputs
Frequency Response	30Hz – low-pass crossover setting
Dimensions (H x W x D)	18-1/16 x 14-7/8 x 15-7/8" 459 x 378 x 403mm
Weight	30 lbs/13.6 kg

JBL Consumer Products
250 Crossways Park Drive, Woodbury, NY 11797
8500 Balboa Boulevard, Northridge, CA 91329
1-800-336-4JBL (4525) (USA only)
www.jbl.com

© 1998 JBL, Incorporated
JBL is a registered trademark of JBL, Incorporated.
Printed 8/98 ♻ Part No. DPS-100M
H A Harman International Company